

Fig. 2

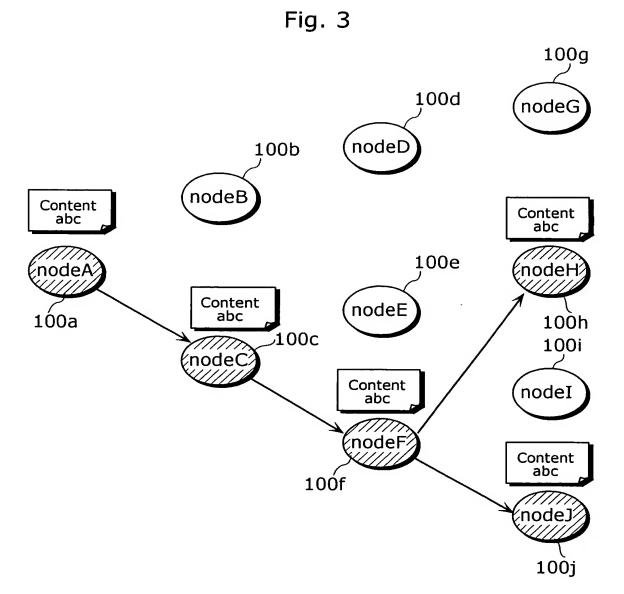


Fig. 4

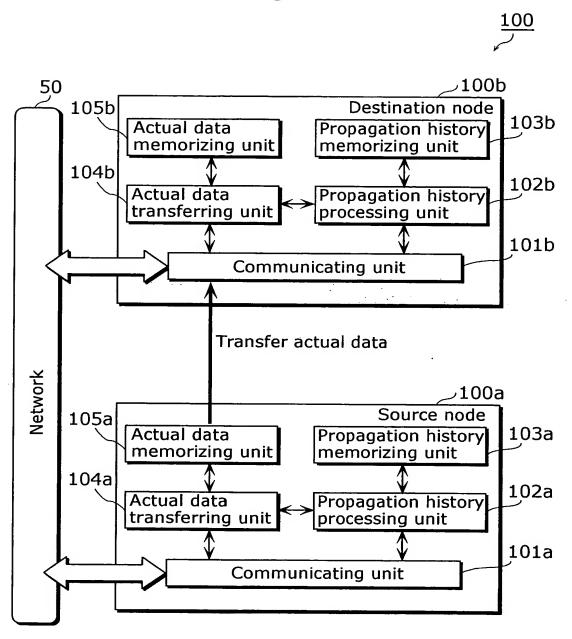


Fig. 5A

Managed by nodeC

Content ID:abc

- 2 generations earlier:
- 1 generation earlier:nodeA
- 0 generation (self):nodeC
- 1 generation later:nodeF
- 2 generations later:nodeH,J

Fig. 5B

Managed by nodeF

Content ID:abc

- 2 generations earlier:nodeA
- 1 generation earlier:nodeC
- 0 generation (self):nodeF
- 1 generation later:nodeH,J
- 2 generations later:

Fig. 6A

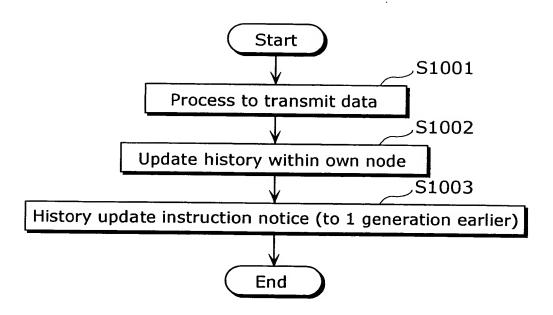
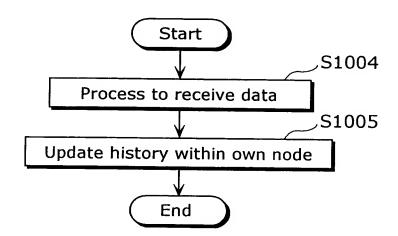


Fig. 6B



Start

S1006

Receive history update instruction notice

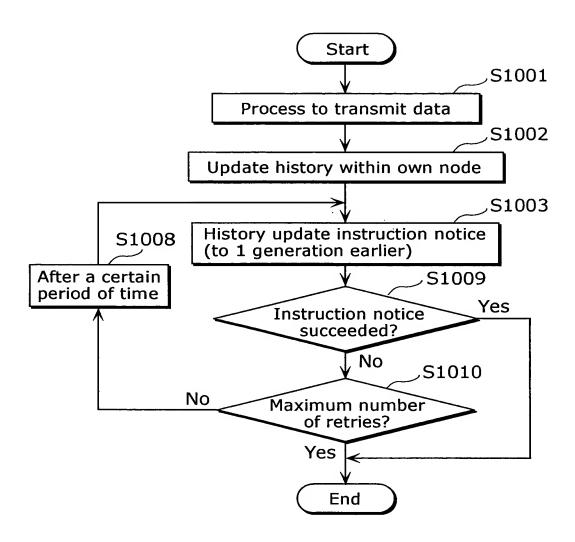
S1007

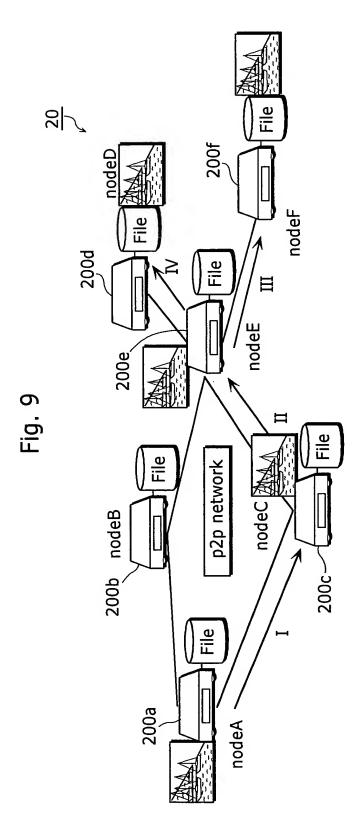
Fig. 7

Update history within own node

End

Fig. 8





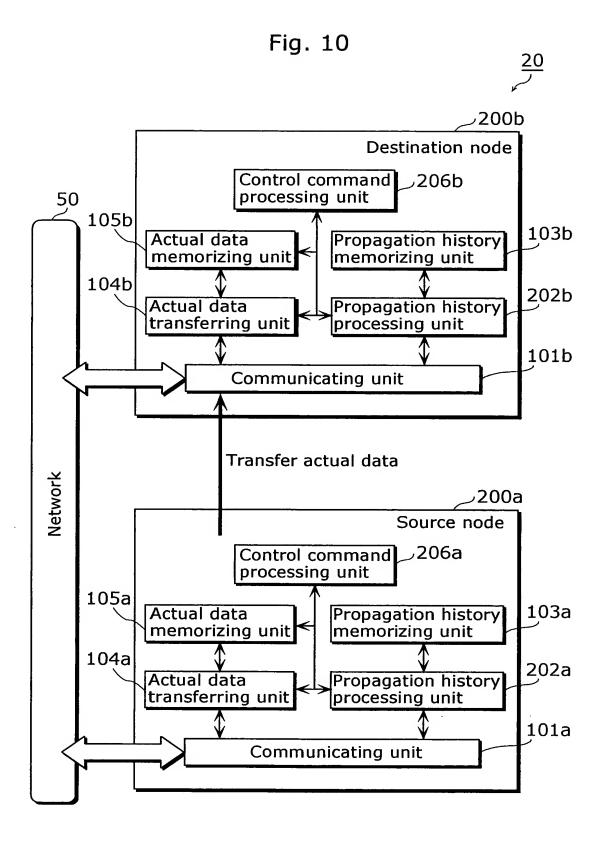


Fig. 11

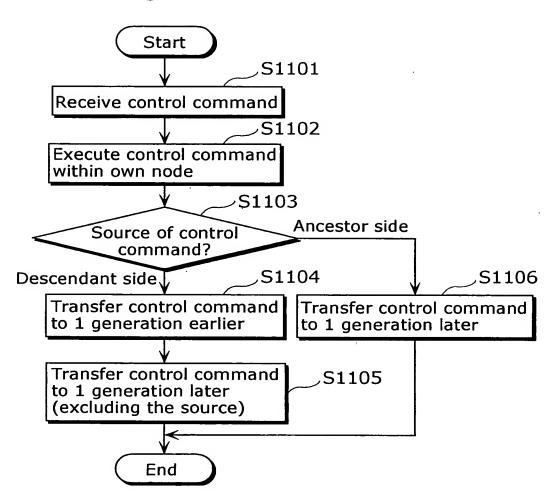


Fig. 12

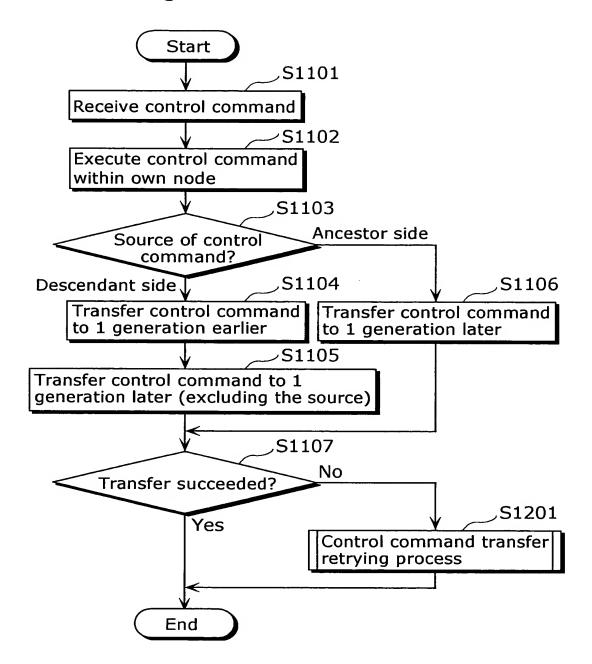


Fig. 13

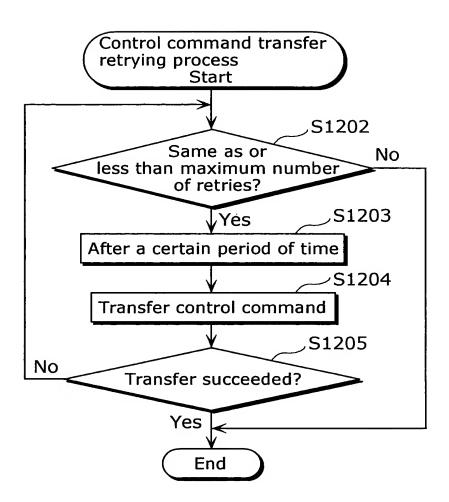


Fig. 14

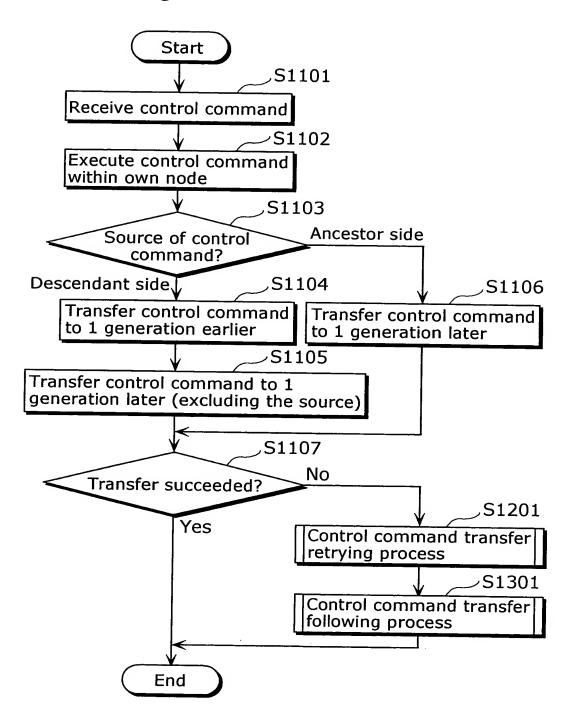
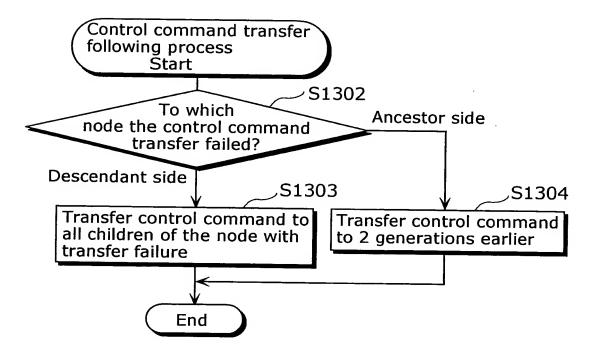
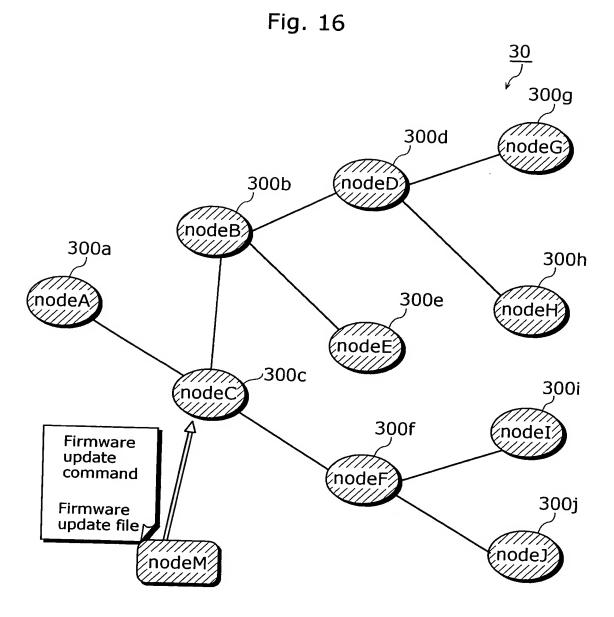
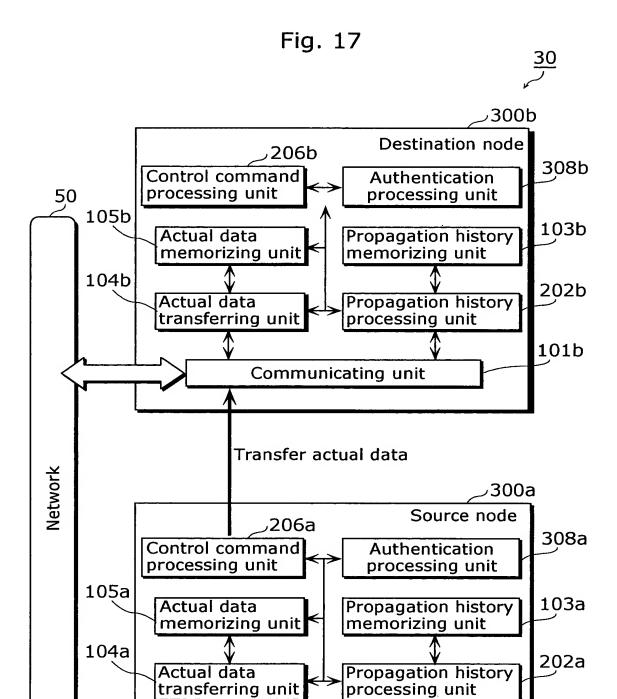


Fig. 15







Communicating unit

101a

Fig. 18 Start S1101 Receive control command S1401 No Is source of control command valid? S1102 **V**Yes Execute control command within own node S1103 Ancestor side Source of control command? S1104 S1106 Descendant side J Transfer control command Transfer control command to 1 generation earlier to 1 generation later Transfer control command S1105 to 1 generation later (excluding the source) S1107 No Transfer succeeded? S1201 Yes Control command transfer retrying process S1301 Control command transfer following process

End